

IN THE CLAIMS

1. (currently amended) A method for identifying a compound capable of treating urinary incontinence, comprising:

a) combining a compound to be tested with a sample comprising a polypeptide selected from the group consisting of:

i) a polypeptide comprising the amino acid sequence of SEQ ID NO:104;

and

ii) a polypeptide encoded by the nucleotide sequence set forth in SEQ ID

NO:103;

under conditions suitable for binding of the compound to the polypeptide;

b) detecting binding of the compound to the polypeptide to thereby identify a compound which binds to the polypeptide; ~~and~~

c) determining the effect of the compound on urinary incontinence in an animal model of urinary incontinence, ~~thereby, and~~

d) identifying the ~~a~~ compound as capable of treating urinary incontinence if the compound reduces urinary incontinence in the animal model.

2. (previously presented) The method of claim 1, wherein the compound is selected from the group consisting of a small molecule, a peptide and an antibody.

3. (previously presented) The method of claim 1, wherein the polypeptide further comprises heterologous sequences.

4. (previously presented) The method of claim 1, wherein the sample comprises the polypeptide, a membrane-bound form of the polypeptide or a cell comprising the polypeptide.

5. (previously presented) The method of claim 4, wherein the cell is selected from the group consisting of a bladder cell, a prostate cell, a kidney cell, a vascular cell, a urethral cell, a dorsal root ganglion cell, a trigeminal ganglion cell, a brain cell, and a spinal cord cell.

6. (canceled)

7. (previously presented) The method of claim 1, wherein binding of the compound to the polypeptide is detected by a method selected from the group consisting of:

a) a competition binding assay;

b) an immunoassay; and

c) a yeast two-hybrid assay.

8-22. (canceled)

23. (previously presented) The method of claim 1, wherein binding of the compound to the polypeptide is detected by an assay for an activity of the polypeptide selected from the group consisting of:

a) a carboxypeptidase assay; and

b) an assay for measuring proteolysis of extracellular peptides or proteins.

24-31. (canceled)